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STUDIES IN GREEK NOUN-FORMATION

Based in part upon material collected by the late A. W. STRATTON, and prepared under the supervision of CARL D. BUCK¹

LABIAL TERMINATIONS

Words in *-φη* or *-φā* (also *-φă*)—in *-φης* or *-φās*, gen. *-φou*—and in *-φos* and *-φov*, gen. *-φou*.

BY E. H. STURTEVANT

The existence of an Indo-European suffix *-bho* has long been recognized, and in recent years it has received rather frequent treatment. There is an excellent summary of our present knowledge of the subject in the new edition of the second volume of Brugmann's *Grundriss* (Part I, pp. 386 ff.; see his references to the more important literature). Upon this we must base our introductory remarks on the use of the suffix in Indo-European in general (pp. 197 to 199), although we shall depart from Brugmann's treatment at several points, and our third paragraph is entirely new.

Only a few words containing the suffix can with any certainty be ascribed to the parent speech. In the first rank stand *ἔριφος* (from **eribhos*), Ir. *earb* "goat," Swed. *järf* "gulo borealis" (from **erbhos*) : Lat. *aries*, Lith. *ēras* "lamb"; *ἀλφός* "white," as substantive "white leprosy," Lat. *albus*, OHG. *elbiž*, OB. *lebedi*, Serv. *lābus* "swan" : OHG. *elo* "yellow"; OP. *naiba-* "beautiful, good," Ir. *noib*, *noeb* "holy" : Lat. *niteo*, Ir. *niam* "splendor," Skt. *nilas* "dark blue"(?). We should probably add to the list *ἔλαφος* (from **eln-bhos*) : Goth., Eng. *lamb* (from **lon-bhom*) : *ἔλλος* (from **ēλνός*) "young deer," Cymr. *elain* "hind," OB. *jelen* "deer" (see Osthoff *Etymologische Parerga* 305); *σφός*, OPr. *subs* "selbst, eigen" (from **s^{eh}bho-*), Goth. *sibja*, NHG. *Sippe*, OB. *seb-ru* "free peasant," Lat. *Sab-īnī* : **se-*reflexive; and Slavic *svobó-da*, *svobo-dá* "freedom," *Suēbī*, OHG. *Swābā*, NHG. *Schwaben* : **sue-* reflexive.²

¹ See Introductory Note, *CP*. V. 323 ff.

² Cf. Lidén *Studien z. altind. u. vergl. Sprachgeschichte* 54 and Solmsen *Untersuchungen z. griech. Laut- u. Verslehre* 197 f. Solmsen derives Skt. *sabhā* "assembly" also from the reflexive stem, but it seems preferable to connect it with the demonstrative **se-* (see p. 199). Brugmann, *Grundr.* 2. 1². 388 (cf. also *Demonstrativpronomina* [CLASSICAL PHILOLOGY VI, April, 1911] 197

It is impossible to draw a sharp distinction between words with an Indo-European suffix and those with a "root-determinative." For example, *κνάφος*, *γνάφος* "a carding comb," *κνάπτω* "card wool," Lith. *knibti* "pluck," *knēbti* "pinch" (Sütterlin *IF*. 25. 66), clearly belong with *κνῆν* "scrape, scratch"; accordingly *κνάφος* may originally have been an abstract derivative in *-bho*, while *ἄγναφος*, *N. T.*, may possibly represent an Indo-European adjective. Similarly we have (*σ*)*κέραφος*, *σχέραφος* "mockery, abuse," Hesych., Lett. *schk'ersbs* "rude," *skarbs* "sharp, etc." : *κείρω*, Lat. *careo*, etc. (Brugmann *IF*. 15. 97). *τρυφή* "luxury," properly "destruction," *τρύφος τό* "fragment" (perhaps originally masculine, cf. *ἔδαφος*), *θρύπτω*, Lett. *drubascha* "fragment," *drubasas* "splinter" stand beside *θραύω* "break," *θραυστός* "frangible," Lett. *drupi* "fragments," *drúpu* "fall to pieces" (cf. p. 209), etc.

Scholars have been more successful in tracing certain uses of the suffix back to pro-ethnic times. Thus, all branches of the Indo-European stock employ it in animal names. Adjectives, though rather less numerous except in Baltic-Slavic, are quite as widespread. It is hardly possible to classify their meanings except for the several languages separately.¹ Abstracts occur with some frequency in Baltic-Slavic and Greek, and occasionally elsewhere.

The abstracts and adjectives seem to be very closely related. The suffix-form *-ibhā-* common in abstracts in Baltic-Slavic, stands beside *-ibho* in Lithuanian and Greek adjectives.² Such pairs as Lith. *dalybas* "sharing" : *dalýbos* (plural) "division," especially of an inheritance, and Goth. *halbs* "half" : *halba* fem. "Seite, Teil" are significant. The animal names probably represent, in part at least, a specialization of the adjectives. For example, several animal names

31), on the other hand, connects only Slavic *svobo-da* with the reflexive stem. Apparently he loses sight of the fact that these etymologies are quite independent of Solmsen's theory that I-E. *su-* became *s-* under certain unknown conditions, since the semantic equivalence of **sue-* and **se-* is indubitable.

¹ Brugmann, *loc. cit.*, lays stress upon the color words; but, of the half-dozen he names, Lat. *galbus* is very likely a Celtic loan word with suffix *-uo* (Walde), while *ἀλωφός* and *ἄργυρος* may be specifically Greek.

² The constant length of the *-i* in Baltic is not original, as is shown by Slavic *-i-*. Lithuanian *-yba*, *-ybé* in abstracts may have been influenced by the equivalent suffix *-ysta*, *-ysté*. The adjectives in *-ybas* clearly stand in some secondary relation to those in *-yvas*, Slavic *-ivü* (see Leskien *Bildung d. Nomina im Lit.* 353). But Greek *σερίφος* (see p. 209) indicates that the parent language had the suffix *-ibho* as well as *-ibho*.

in *-bho* were originally color words. With these we must include words like Goth. *-dūbō*, OHG. *tūba*, Eng. *dove* : Ir. *dub* “black” (? Brugmann *Grundr.* 2. 1². 306), which did not contain the suffix.

The parent speech also employed the suffix in *-bho* or *-bhā* to form derivatives from pronominal stems. The derivatives from the reflexive pronouns have been given above (p. 197). Lidén, *Studien z. altind. u. vergl. Sprachgeschichte* 52 ff., finds demonstrative stems in Lombard *-aib*, OHG. *-eiba* “district” (from I-E. **oi-bhā* or **ai-bhā* : **e-*, **o-* demonstrative), Skt. *sabhā* “assembly” (from I-E. **se-bhā* : **se-* demonstrative), and Skt. *ībhas* “elephant,” properly “possession, property,” *ībhyas* “rich” (: **i-* demonstrative). Some of these pronominal derivatives belong with the adjectives (*σφός*, OPr. *subs*); Germanic *-aib* and *-eiba* and Skt. *sabhā* have a collective force, and so go more nearly with the abstracts.

All the inherited types are represented in Greek, and a large majority of the Greek derivatives fall under them.

1. *Animal names*.—As in Indo-European in general, animal names most frequently show the suffix under discussion. *ἔριφος* and probably *ἔλαφος* were inherited (see above). *κόττυφος* “black-bird” is perhaps onomatopoetic in its first member. Prellwitz suggests a derivation from **kuklubhos* (with dissimilation of the first vowel ?), and compares Skt. *kukkubhas* “phasianus gallus.” Brugmann, *Grundr.* 2. 1². 390, sees onomatopoeia in the bird names *κέπφος*, *κουκούφας*, and *ἀπαφός*. Thompson, *Glossary of Greek Birds*, thinks that *κέπφος* is probably foreign. *κουκούφας* (also *κουκούφος*) seems to be an Egyptian word for *ἔποψ* (Thompson *op. cit.*; cf. Horapollo 1. 55). *ἀπαφός*· *ἔποψ*, *τὸ δρυεον*, Hesych., is very likely a variant of its synonym, under the influence of the animal names in *-φος*.

The Hesychian *κόραφος*· *ποιὸς δρυς* is derived from the stem seen in *κορώνη*, *κόραξ*, Lat. *cornix*. *σιγαλφοί*· *οἱ ἄγριοι τέττυγες*, Hesych., is to be connected with *σιγηλός* “mute,” used of animals in Arist. *H.A.* 1. 1. 29, and with *σιγάλεος* “silent.” Probably it applies to the species of which the scholiast on Ar. *Av.* 1095 Dind. says: *ἔτερον δὲ γένος σίγιον καλεῖται παρὰ τὴν σιωπήν*.¹

¹ Schmidt writes Hesychius’ lemma *σιγαλ[φ]οί*, while L. Dindorf (*Thesaurus* 7. 216) prefers *σιγαλέοι*. Doubtless one or the other is right as far as the first definition (*οἱ ἄγριοι*) is concerned; but I suspect that two articles have been amalgamated.

κεμφάς. ἔλαφος, Hesych., belongs with **κεμάς** -άδος, Hom., +. The suffix is -φā-, although it is possible that the influence of the primitive carried the word over to the -άς -άδος declension. **χρύσαφος**, Marcell. Sid., and **χρύσοφος**, CGL., a fish, Lat. "aurata," show the influence of the suffix, but they are probably modifications of **χρύσοφρυς**, the name which is usually applied to the fish in question, rather than new derivatives from **χρυσός**. **κίραφος**. ἀλώπηξ is a derivative of the word which precedes it in Hesychius, **κίρα**. ἀλώπηξ, Λάκωνες; unless we should rather suspect a corruption of the text. An article in Antonius Monachus' lexicon runs: **βοῦφος**. ὅρνεον. **βοῦφος** ἐπιφοιτᾶ, ἐπὶ τῶν ἀσυνέτων καὶ παχυφρόνων εἱρηται. Whether the bird in question was merely a creature of the imagination or a real bird of sluggish habits, its name is derived from **βοῦς**.

The late **κουτάλαφας** "cicada," Port., seems to be connected with **κουτάλα**, Doric for **σκυτάλη** "club, staff," also "sucker" on a tree (Geop. 9. 11. 4). Perhaps we may think of **κουτάλαφας** as the "insect on the twigs."

ὅρφος,¹ a kind of fish, is Attic **ὅρφως**, assimilated to the words with our suffix.

γρύψ, **γρυπός** (also **γρυφός**) "griffin," Hes., +, and its variants. **γρυβός**, Hesych., and **γρυφός**, Pomponius Mela, are certainly to be connected in some manner with Hebrew *k'rūb*, a creature combining the forms of man, ox, lion, and eagle (Ezek., chap. 1) or of man, lion, and eagle (Ezek., chap. 10). As there seems to be no satisfactory Semitic etymology of the word (Thayer *Lexicon of the New Testament*, s.v. *χερουβίμ*), it is probable that Greek and Hebrew borrowed from some common source. The final consonant of the Hebrew word makes it probable that **γρυβός** was the original Greek form, in spite of its late appearance in our records.² The stem with π is due to a fancied connection with **γρυπός** "hook-nosed." **γρυφός** and **γρύψ**, **γρυφός** (Verg. *Ec.*, +) show the influence of the animal names in -φος.

σιλφη "book worm" may be derived from **ψιλός** "bare," in view of Aristotle's (*H.A.* 8. 17) remark: **τὸν αὐτὸν δὲ τρόπον** (i.e., as the

¹ Herodian, 1. 166. 19 L., cites the word as a barytone. Modern **δρφός** is from **ὅρφως**.

² Cf. Fick *KZ*, 42. 288. This view now seems to me more probable than the one which I expressed in *CP*. V. 331.

serpents) *καὶ τῶν ἐντόμων ἐκδύνει τὸ γῆρας ὅσα ἐκδύνει, οἷον σίλφη*. . . . The change from *ψ*- to *σ*- would have to be explained as an instance of dissimilation (from *πσιλπη). Both meaning and etymology of *τίφη*, Ar. *Ach.* 920, 925, are uncertain. It is indeed said by Phrynicus, 359 Ruth., and the scholiast on the passage to be equal to *σίλφη*; and probably we should read *τίφη* instead of *σίφη* in Herodian 1. 108. 14 L.: ἐγένετο δὲ ἔλλειψις, ὡς παρὰ τοῖς Ἀττικοῖς ἡ <τ>ίφη ἐκ τοῦ σίλφη παρ' ἡμῖν λεγομένη. . . . But the two words can hardly have been equivalent in Aristophanes' day. In the *Acharnians*, Nicharchus propounds a scheme to burn the ships by putting a wick ἐς *τίφην*, and sending it to the dockyard through a sewer. Dicaeopolis replies: *σελαγῶντ' ἀν ύπὸ τίφης τὲ καὶ θρυαλλίδος*; Clearly a book worm is out of the question; a glow worm would fit the context admirably.¹ We may at least, therefore, be sure that *σίλφη* and *τίφη* have no etymological connection, and that in the classical period they differed in meaning. The semantic confusion which we have noticed in Herodian and elsewhere was responsible for Lucian's *τίλφη*, a contamination of the two.

Beside (*σ*)*κιδάφη* and *κιδάφος*² “fox,” we find *κινδάφη*, *κινδάφιον*, Hesych., and *σκινδάφος*, Oudendorp's conjecture for *σκινδακός* in Aelian. The forms with a nasal represent a contamination with the synonymous *κίναδος*, but the etymology of *κιδάφος* itself is unknown. Other obscure words are (*ἀσ*)*κάλαφος*, an unknown bird (see p. 215), *ράφοι*· *δρυεις τινές*, Hesych., *βαιλώμφαι*· *αἱ αἴγες ἐν ἱερατικοῖς*, Hesych., *σύρφος*· *θηρίδιον μικρόν, ὅποιον ἐμπίς*, Hesych., *κυφή*, a kind of shrimp, Epich., +, *καθονφήν*³ *ἀλώπεκα*, Hesych.

Εἴραφιώτης, Lesb. *Ἐρραφεώτης*, an epithet of Dionysus, h. Hom., +, suggests **εἴραφος*, **ἐρραφος* “goat” (Froehde *BB.* 21. 199), or “fox” (Ehrlich *KZ.* 39. 567), or the like.

*ἀκαλήφη*⁴ and (*ἀ*)*σκαλάφη* “sea-nettle,” as well as “nettle,” and *γόμφος*· *ἰχθύς*, Hesych. : *γόμφος* “nail” are animal names only in

¹ Herwerden, *Lex. Gr. Suppl.*², identifies Aristophanes' *τίφη* with the homonymous plant name.

² Hesychius' first definition, “δόλως,” doubtless represents a figurative use of the animal name.

³ Schmidt conjectures *κάθονριν* = *κβθονριν*.

⁴ *ἀκαλύφη*, in Pollux and Simeon Seth, seems to be an itacistic blunder for this. See also *Thesaurus s.v.*

a derived sense, and are quite independent of the suffix. *σέρφος*, the name of an insect, is a variant of the adjective *σέριφος* (see below). There are also several compound animal names in the following word-lists, as *τραγέλαφος*, *σχινότροφος*, *κιχλοκόσσοφος*.

2. *Adjectives*.—Several of the Greek adjectives with suffix *-φος* have a derogatory force. But there is hardly sufficient evidence that this is anything more than accidental and that such a force had become consciously associated with the suffix. *λίσφος* “ἀπυγος,” Moer., Tzetz., as substantive, *λίσφα τὰ ἴσχια*, *E.M.*, is cited as Attic for *λίσπος*. A derogatory connotation attaches to the latter form in Ar. *Ran.* 826, *λίσπη γλῶσσα* (of Euripides), to the compounds, *λισπόπυγος* and *λισπόπυξ*, and to *ὑπόλισπος* in Ar. *Eq.* 1368, *πολλοῖς γ' ὑπολίσποις πυγιδίοισιν ἔχαρισω*. Elsewhere *λίσπος* has no disagreeable connotation, and *ὑπόλισφος* in Philostr. *De Gymn.* 35, *τὰ δ' ὑπὸ τῷ ἴσχιῷ μήδῳ ὑπόλισφα ἔστω μήτ' αὖ περιττά*, is innocent enough. *λίσφος* is a derivative of *λισσός* “smooth” (cf. ὅλισθος from ὅλισθάνω, ὅλισθος; *CP.* V. 337). *λίσπος* has fallen under the influence of *λιπαρός*, etc.

σκελιφρός “dry, parched, lean,” Hipp., implies a base **σκελιφος*, from *σκέλλω* “make dry, parch.” The form *σκελεφρός*, Erot., shows assimilation of *ι* to the preceding *ε*, and so does the primitive adjective in its two recorded substantival uses: *κελεφός*, Hegemonius, +, is one of the numerous late Greek words for “leper”; *σκέλεφορ* (Schmidt; MS *σκέλεφερ*). *βόλους ὄνομα*, Hesych., was perhaps a throw in which some or all of the *tali* rested upon the narrow side, hence the “narrow throw.”

According to Antonius Monachus and Suidas, the phrase *γραῦς σέριφος* or *γραῦς σερίφη* was properly the Sicilian name of the locust usually called *μάντις*, and was used figuratively for “old maid”; but they have evidently reversed the process: *γραῦς* means “old woman” literally, not figuratively. The adjective appears elsewhere in the proper name *Σέριφος*, a small island (cf. Fick *Vorgriech. Ortsnamen* 57), in *σέριφον*,¹ a kind of wormwood, and in the Hesychian gloss: *Σέριφος· Ἀριστοφάνης τὴν Λακεδαιμονια Σέριφον. ἔστι δὲ καὶ πόα*

¹ L. and S. cite *σέριφος* ἡ from Diosc. 3. 27 (= 3. 24 Spengel). That passage, however, contains the accusative singular without the article. The gender is shown to be neuter by the article in Galen 13. 126 K.

σέριφος λεγομέμη. Instead of this Photius writes: *Σέριφον· τὴν Λακεδαιμονίαν, διὰ τὸ σκληρῶς ζῆν.* Apparently *σέριφος* meant “dry,” in combination with *πόα* “hay,” and in the phrase *γραῦς σέριφος* “a dried-up old woman”; while *σέριφον* “wormwood” and *Σέριφος*, the island name, as well as *Σέριφος = Λακεδαιμωνία*, show a derived sense, “unpleasant, harsh” (cf. *ξηρός* opposed to *ἡδύς* in Eur. *Andr.* 784). *σέρφος*, an insect, differs only in the form of the suffix. For the root, Prellwitz suggests a comparison with *ξερός* “dry.”

στέριφος “barren,” of women, animals, and plants, Ar., +, is a derivative of the synonymous *στεῖρος*; likewise *στέριφος* “firm” from *στερεός*. *ἄγροφον· ὀρεινόν*, Galen *Lex. Hipp.*, is derived from *ἀγρός*. *στυφός* “astringent” comes from *στύω* “make stiff.” *λίηφος· δεινός*, Hesych., is possibly connected with *λίην* “very much, over-much.” In *λαφός· ὁ ἀριστερᾶς χειρὶ χρώμενος*, Hesych., φ probably represents f.

There remain four color words, of which one, *ἀλφός*, is certainly inherited. *ἀλωφός* “white,” Hesych., is made on the same root as *ἀλφός*, Lith. *alvas*, etc., and is probably an inherited form (see Brugmann *Grundr.* 2. 1². 388). *ἄργυφος*,¹ a Homeric epithet of sheep, contains the stem of *ἄργυρος* and Skt. *árjunas* “white.” *κίνιφος· ὁ ποίκιλος*, Anton. Mon., Suid., seems to go with *κινέω*, *κίνυμαι* “go” and *κινύσσομαι* “waver, sway.”

3. *Abstract substantives.*—Most of the Greek abstracts in our suffix differ from those in Baltic-Slavic in having the o-stem and masculine gender. All the masculines have recessive accent. The inherited forms (*σ*)*κέραφος*, *σχέραφος*, *κνάφος*, *γνάφος*, *τρύφος*, and *τρυφή* may contain the suffix (see p. 198). It is certainly present in the following (Brugmann *Grundr.* 2. 1². 390): *κόλαφος* “buffet” : *κόλος*, *κολάζω*, etc.; *φλήναφος* “ineptiae” : *φληνέω*, *φληνάω*, *φληνύω*; *κρόταφος* “side of the forehead,” plural “the temples,” originally “a striking, a pulse” : *κρότος*, *κροτέω*, *κρόταλον*. *τὸ ἔδαφος*, originally a masculine abstract, owes its change of stem and gender to the influence of the synonymous and cognate *ἔδος*. Homeric *εἰλυφόων* “whirling” implies an abstract substantive **φέλυνφος* :

¹ *ἄργυφος* is an extension of this on the model of *ἄργυρος*, *μαρμάρεος*, etc. (Brugmann *Grundr.* 2. 1². 387). Lycophron’s *συφέος* “pig sty,” beside Homeric *συφέος*, *συφείος*, shows the reverse process.

**φέλνυμι* (*ειλύω*).¹ *τῦφος* “smoke, folly” : *θύω* must antedate the dissimilation of aspirates.

For the noun *σκίραφος* and its derivatives we have a bewildering array of meanings. *σκίραφος* itself means “trickery, cheating” in Hipponax, “gambler” and “licentious” according to Herodian 1. 225. 13 f., 2. 581. 22 ff. L., and “dice box” according to the *E.M.* *σκιραφεῖον* is the name of an Athenian gambling den (*Isochr.*, +). *σκ[ε]ιραφεῖν* means “play at dice” (*Hesych.*); *σκιραφευτής*, “dice player” (*Amphis*); and *σκιραφώδης*, “tricky, swindling” (*Phryni-chus* in *A.B.* 101). Herodian, *loc. cit.*, is surely right in deriving the group from *Σκίρον*, the name of the red light district in Athens, where the *σκιραφεῖον* was situated. The various recorded meanings can most easily be arranged if we start with *σκίραφος* in an abstract sense “rascality, gambling.” This developed into the concrete “dice box” and “rascal, gambler.” The connecting link between *Σκίρον* and *σκίρ-α-φος* was probably **σκίρ-ων* “frequenter of the *Σκίρον*.”

Several Greek abstracts show the feminine which appears constantly in Baltic-Slavic. *τρυφή* has already been mentioned. *κνήφη* “the itch,” LXX, Suid., is a specifically Greek derivative from *κνῆν* “scratch, tickle,” and has no direct connection with the inherited *κνάφος*.

Beside the familiar *κορυφή*, we find a masculine *κόρυφος*² in an inscription in the Megarian dialect (*IG.* 4. 929. 17 ff.) referring to certain landmarks between Epidaurus and Corinth. *Κόρυφον*, the name of a mountain near Epidaurus, *Paus.* 2. 28. 2, suggests that the word is Epidaurian rather than Megarian. A wholly different meaning of the *o*-stem appears in the Hesychian gloss, *κόρυφος*. *κόρυμβος γυναικεῖος*. The force of *κορυφή*, as of *κόρυφος*, is usually concrete, “summit, top”; but a trace of the abstract meaning “height” is preserved in Pindar’s *κορυφὰ λόγων, λόγων κορυφαὶ* “the climax,” *κορυφαὶ πόλεων* “the best of cities,” etc.; although here too the concrete idea was present to consciousness, as is shown by Plato’s use of the noun with the verb “to go” (*Crat.* 415 A)—

¹ Solmsen *Untersuchungen z. griech. Laut- u. Verslehre* 325. His alternative suggestion of an original adjective is less probable, since it would not correspond in meaning with the Greek adjectives in *-φος*.

² The accent is determined by Herodian 1. 225. 18 L.

ἔρχομαι γάρ ἐπὶ τὴν κορυφὴν ὅν εἴρηκα, ἐπὶ τὴν κορυφὴν δεῖ τῶν εἰρημένων ἐλθεῖν.

4. *Concrete substantives*.—Like other abstract substantives, those in *-φος* and *-φη* sometimes came to have a concrete sense, as *ἔδαφος* “bottom,” e.g., of a ship, *Od.* 5. 249, *σκίραφος* “gambler,” *φλήναφος* “babbler,” *κορυφή* “summit.” Other concrete substantives, as we have seen above (pp. 202 ff.), sprang from the substantival use of adjectives in *-φος*, as *κελεφός* “leper” and *σκέλεφορ* “a throw at dice” from **σκέλιφος* “dry, thin”; *Σέριφος*, an island, and *σέριφον* “wormwood” from *σέριφος* “dry, unpleasant”; *λίσφον* “(small) buttock” from *λίσφος* “smooth, flat”; *ἀλφός* “a dull-white leprosy” from *ἀλφός* “white.”

After the model of these and similar words, the suffix *-φος*, *-φη* was used to form concrete substantives. *γάλεφος*, Interpol. Diosc., is a variant of the plant names *γάλιον*, *γαλεόβδολον*, and *γαλεόψις*. Walde, *s.v. galea*, derives these three words from *γαλέη* “weasel,” in the secondary sense of “helmet” which is seen in the borrowed Latin *galea*. *γάλεφος* is derived from the same base with the suffix *-φος*. *ἐγκιλλαφον· οὐρά*, Hesych., is a derivative of *ἐγκιλλον· οὐράν*, Hesych. *ἀγρίφη*¹ “harrow, rake,” with its derivative *ἀγρίφνα*, *Anth.* *P.* 6. 297, and *ἀγριφος* “grapple,” Const. Porph., may be from *ἀγρεύω*, *ἀγρέω*. *ἀγριφος* “wild olive,” Hesych., whence comes *Ἀγρίφα*. *Ἀθηνᾶ*, Hesych., seems to be connected with *ἀγριος* “wild.” *οὐλαφος· νεκρός*, Hesych., suggests *δλλυμι*, *οὐλόμην*, etc. *ταρήφη· τάρπη*, Hesych., goes with *τάρπη*, and *ταρσός*, *ταρρός* “crate, basket.”

“*Αλθηφον* or “*Αλθηφος*, the name of a district in Troezenia, belongs with *ἀλθετο*, *ἀπαλθήσεσθον* “heal,” Hom., *ἀλθήσκω*, Hipp., *ἀλθαίνω*, Hipp. and Alexandrian epic poets, *ἀλθεξις* “a healing,” Hipp., Galen, *ἀλθαλα* “wild mallow,” Theophr. (as proper name, Hom.), *ἀλθήις*, *ἀλθεστήρια*, Nic., *ἀλθεύς*, *ἀλθος*, Hesych., and several proper names in *Ἀλθαι-*, *Ἀλθη-*, *-ἀλθης* in inscriptions of Ephesus, Eretria, Cos, and Thasos (Fick-Bechtel, pp. 52 f.). The group evidently belongs primarily to the Ionic dialect, and hence our word is a trace of the original Ionic speech of the Argolic Acte² (cf. Buck

¹ Herodian, 1. 345. 32 L., cites it among *τὰ εἰς φη παραληγόμενα φύσει μακρᾶ*.

² In this connection we may add that Strabo, 10. 4. 18, says that the son of Cirrus, one of the founders of Argos, was named *Ἀλθαιμένης*.

Greek Dialects 2). Very likely the Troezenian variety of vine, called ἀλθηφιάς (Arist. *ap. Ath.* 31 C), got its name from the district "Αλθηφον, either directly or from 'Αλθήφιος, the man for whom Aristotle says that it was named.

If *μαστροφός*, Hesychius' variant for *μαστροπός* "leno," is a derivative of *μαστήρ* "seeker," the *π* of the common form may be due to popular association with *-τροπός* as it appears, for example, in *δύστροπος*, the first word in Hesychius' definition of *μαστροπός*.

5. *Proper names*.—Many appellatives also appear as personal names, among which we may note such as *Κόττυφος*, *Κοσσύφα*, *Ἐριφος*, *Ἀσκάλαφος*, which belong to the large class of simple names, originally nicknames, based upon names of animals. Cf. Fick-Bechtel 314 ff. and Bechtel "Griech. Personennamen aus Spitznamen," *Abh. Gött. Ges. Wiss.* 1898, No. 5, p. 17, and *passim*. *Ἐλαφος* is the name of a small stream in Arcadia (Paus. 8. 36. 7), but on its supposed occurrence as a personal name see Bechtel *op. cit.* 45.

Some names in *-φος* may be regarded as the short forms of full names the second member of which begins with *φ*, e.g., "Αντιφος beside 'Αντιφάνης, 'Αντιφίλος, 'Αντιφῶν, etc., or *Στάρτοφος* beside *Στρατοφάνης* (so Fick-Bechtel 255). But there are several for which no such full names are quotable, and there is no reason why we should not recognize the adjective suffix *-φος* as one of those which, like *-λος*, etc. (cf. Fick-Bechtel 24 ff.), may be employed in short names derived from full names or in those of the class treated of by Bechtel *op. cit.*

Thus *Τέκταφος*, which Fick-Bechtel say implies a full name *Τέκτα-φῶν* or the like, is more probably formed directly from the stem of *τέκτων*; similarly "Ασταφος from "Αστων, while "Αστοφος is a short form of 'Αστό-φιλος or the like; *Κέρκαφος*, a mythical ancestor of the Rhodians, from *κερκνός*. *ιέραξ*, Hesych. (Fick *BB.* 21. 280); *Τύλιφος*, a mythical shepherd, from *τύλη*, *τύλος*. Is *Θελέροφος*, name of a poet, formed from a **θέλερος* "wishing, wilful"? There are some examples of similar extensions in *-φας*. *Ματρίφας* (gen. *Ματρίφα*, *IG.* 12. 2. 646. 19) is, like *Ματρίχη*, from *Μᾶτρις*. From *Κλέων* is formed *Κλιόνφας*, *IG.* 12. 3. 1181 (or *Κλιώνφας*? Cf. names in *-ωνδας* and *-ονδας*), and the name of another Melian, *Ἐπόνφας*, or *'Επόνφης* in the adopted Attic form, *IG.* 12. 3. 1187,

must be of the same type (from an **Επων*?). *Όνόφας*, Herodian 1. 57. 15, 2. 655. 4, may be a nickname derived from *ὄνος*.

6. *Regressive formations from diminutives in -αφιον*.—Such a form as *ἐλάφιον*, Ar., +, diminutive of *ἐλαφος*, gave rise to *θηράφιον* from *θήρ*, and to a whole series of diminutives having no relation to animal names, e.g., *ξυράφιον*, *χρυσάφιον*, *χωράφιον*, *μνημάφιον*, etc. In a similar fashion arose the diminutives in *-ιφιον* and *-υφιον*. Cf. now especially Walter Petersen *Greek Diminutives in -ION*, pp. 276 ff. In late times these were felt as diminutives in *-ιον*, and by regressive derivation there arose many new forms in *-φος*, *-φη*, *-φα*. So modern Greek *χωράφα*, *ξυράφα*, from *χωράφιον*, *ξυράφιον*, like *σταφύλα* (not from ancient *σταφυλή*, but) from *σταφύλιον*, and countless others. Cf. Hatzidakis *Μεσαιωνικὰ καὶ νέα Ελληνικά* 2. 139 ff. *θήραφος*, a late medical term for a small insect, arose in the same way, and *θέαφος*, *θείαφος* (also *τεάφη*) “sulphur” is very likely a regressive formation from *θεάφιον*, rather than an original formation in *-φος* and the source of *θεάφιον*, as assumed by Petersen *loc. cit.*

The form of the words that we have been discussing calls for some treatment. It will be enough, however, to summarize briefly from that point of view some of the facts already stated in detail. In particular we must notice the two dissyllabic forms of the suffix, *-ιφος* and *-αφος*.

The suffix *-ibho-* appears in Baltic-Slavic abstracts and Lithuanian adjectives as well as in Greek adjectives (see p. 198). Probably it arose from the incorrect analysis of derivatives of *i*-stems (cf. *ἔρι-φος* : Lat. *aries*). We have discussed *σέρι-ιφος* (beside the substantive *σέρφος*), *στέρι-φος*, *κίνι-φος*, and **σκελ-ιφος*. *Τύλ-ιφος* (: *τύλη*, *τύλος* “callus”) was probably in the first place an adjective meaning “callous.” In *ἄγρι-φος* the *i* belongs to the base.

The suffix *-φος* was frequently appended to the weak form of nasal stems as in *ἐλα-φος* : *ἐλλός* from **ἐλνός* (above, p. 197), *κόρα-φος* : *κορώνη*, *Κέρκα-φος* : *κερκνός*, *Τέκτα-φος* : *τέκτων*, **Αστα-φος* : **Αστων*. In several other cases we may suspect that the base of a derivative in *-αφος* is a lost substantive in *-ων*; *σκίρα-φος* “rascality” seems to be from **σκίρων* “frequenter of the *Σκίρον*” (see p. 204), *φλήνα-φος* “ineptiae” may be from **φλήνων*, and possibly

κρότα-φος, from **κρότων*. From these and similar words arose a suffix *-αφος* which appears in *χρύσ-αφος* : *χρύσ-οφρυς*, *ξδ-αφος* : *ξδος*, *έγκιλλ-αφον* : *έγκιλλον*. Compare with these words the diminutives in *-άφιον*.

Nearly all words containing our suffix have recessive accent. The exceptions are: the inherited *ἀλφός* (with its congener *ἀλωφός*), the feminines *κυφή*, *καθουφή*, *τρυφή*, and *κορυφή*, of which only the last certainly contains the suffix, the Hesychian glosses *σιγαλφός* and *κεμφάς*, which may have been influenced by the primitives *σιγηλός* and *κεμάς*, the late word *κελεφός* and the obscure word *μαστροφός*, and finally, *στυφός*.

VARIATION BETWEEN THE THREE LABIAL MUTES

So many of the words in *-φη*, *-φης*, and *-φος* show variants with *β* or *π*, that we are compelled to inquire into the causes of the variation. For completeness' sake we shall include in the discussion a number of words which do not properly fall under the topic to which these studies are devoted; and we shall find it convenient to treat here the few cases of variation between *π* and *β*.

1. *π* : *β*.—The Indo-European variation between tenuis and media, particularly frequent in root-finals (Brugmann *Grundr.* 1². 629 ff.), is not often reflected in the Greek labial stems. It occurs, for example, in *σκαπάνη* “mattock,” (*σ*)*κάπετος* “trench,” etc., Goth. *skaban* “shear” : Lat. *scabo*, Lith. *skabùs* “cutting” (Brugmann *Grundr.* 1². 629); and in Lat. *stīpo*, Lith. *stimpù* “stiffen,” Eng. *stiff*, etc. : *στίβος* “path,” *στίβη* “hoar frost,” *στείβω*, Lith. *staibus* “strong,” etc. (Walde).

The *β* of *βλάβη*, beside Cretan *ἀβλοπές*, *ἀβλοπία*, *καταβλαπέσθαι*, with original *π* as is shown by Lat. *mulco*, is due to assimilation to the initial consonant of the root (cf. vulgar Eng. *Babdist* for *Baptist*).

Νιόπη, on an Attic vase, gets its *π* from the rather numerous mythological names in *-όπη* (Meisterh.³ 77. 3). *γρύψ*, *γρυπός*, beside *γρυβός* with original *β*, shows the influence of *γρυπός* “crooked” (see above, p. 200). *ἀστραπή* for *ἀστράβη* “saddle,” Anon. in Rhett. Gr. 8. 668, involves a rather grotesque popular etymology. *κῆβος* = *κῆπος*, *στύβη* = *στύπη*, and *κόλλαβος* = *κόλλωψ*, *κόλλοπος* show the influence of the suffix *-βος*, *-βη* (see *CP.* V. 332, 333, 341).

2. π : ϕ .—A larger number of Greek words show a variation between π and ϕ , and in some cases this may go back to proethnic times. There was in the parent speech an occasional interchange of tenuis and tenuis aspirata (Brugmann *Grundr.* 1². 632 f.), as in $\pi\lambda\alpha\tau\acute{u}s$: Skt. *prthūś*, Lat. *rota* : Skt. *rāthas*, Av. *raþō* “wagon.” We have an additional example of this kind in Lat. *pampinus*, *papilla*, Skt. *pippalas* “berry,” etc. : $\pi\mu\phi\acute{d}s$ “blister,” $\pi\mu\phi\delta\lambda\nu\xi$, $\pi\mu\phi\xi\xi$ “bubble” (see Walde *s.v. pampinus*).

The interchange of Indo-European *bh* and *ph* appears in $\tau\mu\phi\acute{d}s$ “fragment,” Hom., +, *τρυφή*, *θρύπτω*, etc., Lett. *drubascha* “fragment,” *drubasas* “splinter” beside *drupi* “fragments” and *drúpu* “fall to pieces.”¹

Walde, *Etym. Wörterb.* *s.v.*, finds Indo-European variation between *bh* and *p* in *σκάριφος* “stile,” *σκαριφισμός* “a scratching,” Ar., *σκαριφόμαι* “scratch, sketch,” Schol. Ar., Lat. *scribo*, OHG. *scriban*, OS. *scrīban*, OFris. *skriva* “write” : Lett. *skrīpāt* “to scratch,” *skrīpst* “curved knife,” OIsl. (*h*)*rífa* “to scratch.” If, however, we assume I-E. **sqrīph-* (Prellwitz), we can trace all the forms to one original, for the Germanic words with *b* are probably Latin loan words, as is indicated by their meaning and by the *f* of OIsl. (*h*)*rífa*. The meaning of OFris. *skrīva*, OE. *scrīfan* “to enjoin punishment upon,” OIsl. *skript* “confession, punishment” may easily be derived from the meaning “write”; cf. *γράφεσθαι* “to indict” and *γραφή* “indictment.”

$\tau\acute{e}\theta\eta\pi\alpha$ “be astonished,” Hom., beside *ἔταφον*, Hom., *τάφος* “astonishment,” Hom., owes its π as well as its τ to the dissimilation of aspirates.

More frequently the Greek variation between ϕ and π is due to analogy. As Osthoff, *Perfect* 301, long ago showed, the ϕ of *ἀλείφω*, beside *λίπα*, *λίπος*, *λιπαρός*, etc., arose from the analogy of *ἐρέψω*, *ἥρεψα* : *ἐρέψω*, and the like. Similarly the presents in -*πτω* form the connecting link between forms with original π and later forms

¹ It is possible that *drup-* represents I-E. **dhrup-*, but an Indo-European variation between *bh* and *p* is problematic. The relationship of Eng. *drop*, etc. (I-E. **dhrub-*), is not certain. It was suggested above (p. 198) that the forms with *bh* contain the suffix *-bho*, *-bhā*. If so, this group differs from many others that exhibit “root determinatives” only in that we can identify one of the “determinatives” with a formative element that continued to be productive. In any case, the words certainly belong under this head.

with ϕ . Thus we have *κάπη* “crib, manger,” Hom., but *ἔγκαφος* “mouthful,” Eupolis (*ἔγκάπτω* “gulp down,” perfect *ἔγκέκαφα*); *σκαπάνη* “mattock,” (σ)*κάπτετος* “trench,” Lat. *scapula* “shoulder blade,” OB. *κοράτη* “dig,” but *σκαφή*, *σκάφος* “a digging,” *σκαφεύς*, *ἔσκαφην*, etc. (*σκάπτω*; Solmsen *Beitr. z. griech. Wortforschung* 196 ff.); *ῥάπις* “needle,” Epich. 138 Kaib., Lith. *verpū* “spin,” but *ῥάφις* “needle,” *ῥάφη* “a stitching, seam,” *ῥάφεύς*, etc. (*ῥάπτω*; cf. Prellwitz); *ῥιπή*, Hom., +, but *ῥιφή* “a throw,” Lyc., *ἀναπόριφος* “*ἄμεμπτος*,” papyri, *ἔρριφην*, Eur., +, *ῥιφίσομαι*, LXX, + (*ῥίπτω*); (σ)*κνιπός* “niggardly,” Lucilius in *Anth. P.* 11. 172, (σ)*κνιπότης*, Ps.-Hipp., +, but *σκνιφός*, Phryn., +, *Γνίφων*, *Μισόγνιφος*, Luc. (*σκνίπτω* “pinch, nip”). The ϕ of *σκνιφός*,¹ beside (σ)*κνιπός* “dim-sighted,” *κεκνιπωμένοι* η *κνιποὶ τοὺς ὁφθαλμούς*, Hesych., is due to the pair *σκνιφός* : (σ)*κνιπός* “niggardly.” That *κνέφας* “darkness” cannot be responsible for the change is shown by the initial σ .

Laconian *ἄγριππος* “wild olive,” in a proverb cited by Antonius Monachus and others, beside *ἄγριφος* “wild olive,” Hesych., and its derivative *Ἄγριφα*. *Ἀθηνᾶ*, Hesych., suggests a popular connection with the phrase *ἄγριος ἵππος*. Perhaps Cyprian *ἔλφος· βούτυρον*, Hesych., beside *ἔλπος· ἔλαιον, στέαρ, εὐθηνία*, Hesych., owes its ϕ to the influence of *ἀλείφω* and the related forms. Doric *ῥάφα* “a large radish” and *ῥάφανίς* : *ῥάπτως* “turnip,” Lat. *rāpum*, etc., were perhaps connected in the popular mind with *ῥάφις* “needle,” an implement that was not unlike a radish in shape.

From their first appearance until the present day the two words *γρῖπος* “fishing net,” Artemid., Diog. L., +, and *γρῖφος* “riddle,” Ar., +, have been kept distinct, with the exception of two occurrences of *γρῖφος* “net” in Plut. 2. 471 D and Opp. H. 3. 80.² The π of *γρῖπος* is further attested by *γριπεύς* “fisher,” Theocr., +, *Γρίπων*, the name of a fisherman, Leonidas in *Anth. P.* 7. 504, *γριπηής*, Antipater in *Anth. P.*, *γριπεύω*, *γριπισμα*, Anton. Mon., *γριπιζω*, Hesych. It seems more likely, then, that the copyists have blundered than that Plutarch and Oppian really knew a by-form *γρῖφος* = *γρῖπος*.

¹ On the provenience of the word, see Herwerden.

² *γιρίφος* in Pap. Tebt. 2. 486 is very dubious, and the perfect participle *γεγριφώς* in Hesych. is in line with *πέπομφα*, etc.

The Latin *cupa* "cask, vat" (*κοῦπα*, *IG*. 14. 1342, *ἡμι-κοίπη*, inscr. in *Comptes Rendus de l'Acad. des Inscr.* 1866, 384) appears as *κοῦφον* in ostraka and papyri (95 A.D., +) and in the *Apophthegmata Patrum*.¹ The word has evidently been brought into semantic relationship with *κοῦφος* "light," i.e., "movable." *κόλφος*, *IG*. 14. 189, +, Modern Greek *κόρφος*, *κόλφος* is *κόλπος*, which changed its *p* to *ph* in Latin (cf. Ital. *golf*, Fr. *golfe*),² and was taken back into Greek in the new form.

ἀμφίδαφος = *ἀμφιτάπης*, Pap. Ox. 2. 298. 9, 10 (first century A.D.), is for **ἀμφίδαπος*. Cf. *ἀμφίταπος*, LXX, +, and *δάπτις* = *τάπης*. The second *φ* is due to assimilation. Cf., with assimilation in the opposite direction, *Ἀνθίλοχος* = *Ἀντίλοχος*.

We have noticed the effect of the suffix *-φος*, *-φη* in *ἄπαφος* : *ἔποψ* (p. 199) and *ταρήφη* : *τάρπη* (p. 205). *κάφος*, *E.M.*, Eust., beside *κάπος* "breath," is of doubtful authenticity. Apparently the word was coined to explain the Homeric *κεκαφηότα θυμόν*. Eust., 1280. 34 f., says: *Ἄποκαπύσαι δὲ ψυχὴν τὸ ἀποπνεῦσαι. κάφος γάρ φασι τὸ πνεῦμα, ἐξ οὐ τὸ κεκαφηότα θυμόν. τὸ δ' αὐτὸ καὶ ὁ κάπος, ἐξ οὐ καὶ ὁ κῆπος, ὡς ἀλλαχοῦ εἴρηται.*³ I doubt the connection of *στύπος* "stick" with *στυφοκόπος* = *ὅρτυγοκόπος*.

On *λίσπος* beside *λίσφος*, see p. 202, and on *μαστροφός* beside *μαστροπός*, see p. 206.

3. β : *φ*.—One of the best-known features of the Macedonian dialect is the development of the Indo-European mediae aspiratae into mediae. In the present connection we need mention only those words in which Macedonian β stands as stem final beside general Greek *φ*. The most certain instances are *κάραβος* : *Σκάρφη*, *κόμβος* : *γόμφος*, *γομφίος*, and *νίβα* : *νίφα*. (See Hoffmann *Die Makedonen* 28, 37, 52.) For the personal name *Κόρραβος*, Hoffmann, *op. cit.* 146, thinks of the suffix *-φος*, but the suffix *-βος* is more common in personal names (see *CP*. V. 337 ff.). We may add to Hoffmann's material *κυβός* = *κυφός*, *Orion* 38. 6 (Herwerden), and the geographical name *Ottolobos* = *Οκτώλοφος*, which *Livy* (31. 36, 40, 44. 3) uses

¹ The papyri and ostraka show that Sophocles, *Lexicon* s.v., was wrong in assuming a nominative *κοῦφος*. The feminine *κούφη* is very late.

² See Kretschmer *BZ*. 10. 581, and Triandaphyllidis *Lehnwörter d. mittelgriech. Vulgärliteratur* 168 footnote. (In line 5 *κόλπος* is a misprint for *κόλφος*.)

³ Cf. Fay *CQ*. 1. 18. On the etymology of *κεκαφηότα*, see Solmsen *Beitr. z. griech. Wortforschung* 123.

of a place in Macedonia and of another in Perrhaibia on the Macedonian border.

Hoffmann, *op. cit.* 37, also finds a Macedonian word *νίβα* “spring” in the Hesychian gloss, *νίβα· χιόνα, καὶ κρήνη*, interpreted in the light of the version given by Suidas and Photius: *νίβα· χιόνα. καλεῖται δὲ οὕτως καὶ κρήνη ἐν Θράκῃ*; for he thinks that the second sentence necessarily implies a nominative *νίβα*. He finds confirmation of such a Macedonian form in the derivative *Νίβας*, the name of a place near Thessalonica. There is no doubt that the article in Hesychius treats two distinct words, but the true form of the second is shown by *Νίψ, Νιβός· ὄνομα κρήνης, E.M. 568. 16*, and *Νίψ, Νιβός· κρήνη, Sophonius in Hilgard's Theodosius 2. 402. 8*. With the last-mentioned glosses Hesychius is in perfect harmony, while the phraseology of Suidas and Photius is not necessarily inconsistent with them. The substitution of *νίψ, νιβός* for Hoffmann's *νίβα* does not of course affect his argument that the word, together with *Νίβας*, is Macedonian and belongs with Ir. *snigim* “drop, rain,” and Skt. *snīhyati* “become moist, sticky,” etc., from a root *sneigwh-* (whether this group is to be combined with that meaning “snow” is, however, a further question). But it is also possible that the root is *neig^u*, which appears in *νίζω, νίπτω, νίπτρον, χέρνιψ, χέρνιβον*, Skt. *nenekti, nejayati* “wash,” Av. *naēnižaiti* “wash something off,” etc. In that case there would be nothing in the form of the word to suggest Macedonian origin.

The Indo-European interchange between media and media aspirata appears, for example, in *ἄλβος* “wealth,” Skt. *árjati* “earn” : *ἀλφή* “gain,” Skt. *árhati* “deserve,” *arghá* “worth”; *κύβος* “a hollow above the hips of cattle,” Eng. *hip*, Lat. *cubo* : *κυφός* “stooping, hump-backed” (Walde, *s.v. cubitum*); *στραβός* “squinting,” *στρόβος* “a whirling,” *στρεβλός* “distorted,” Lat. (originally Umbrian) *strebula* “meat from the hips of oxen” : *στρέφω, στρόφος* (Walde); Ir. *mebul* “disgrace,” Goth. *bi-mampjan* “mock, deride” : *μέμφομαι, μομφή, μεμφωλή* (Fick 2⁴, 208, keeps Ir. *mebul* separate). *ἄροβος* “bitter vetch,” *ἐρέβωθος* “chick pea” : Lat. *errvum*, OHG. *araweiz*, NHG. *Erbse* may represent I-E. **erog^uo-* : **erog^uho-* (Walde; cf. *CP. V. 332*).

In several words analogy has led to the substitution of *φ* for an original *β*. *καλνφή* “covering,” papyrus of the first century A.D., in

the phrase *ἀπὸ καλυφῆς αἰγαλοῦ* “from high water mark” (or possibly “from low water mark”), beside *καλύβη* “hut, cell,” Hdt., +, was formed from *καλύπτω* on the basis of the pairs *κρυφή* : *κρύπτω*, *τρυφή* : *θρύπτω*, *βαφή* : *βάπτω*, etc. Similarly *ἀκαλυφής*, Soph., +, and *ἀκάλυφος*, Diog. L., were formed from *καλύπτω* on the model of such pairs as *ἀναφής*, Plat., +, : *ἀπτομαι*, *ἀρραφής*, Arat., *ἀρραφος*, N.T., +, : *ῥάπτω*, *ἄγναφος*, N.T., +, : *γνάπτω*, *ἄταφος* : *θάπτω*, *ἄτρυφος*, Alcm., : *θρύπτω*. *κολυφρόν· ἐλαφρόν*, Hesych., beside *κολυμβάω* “dive,” *κόλυμβος* “diver,” Ar., etc., Goth. *hlaujan*, NHG. *laufen* (*Zupitza German. Gutturale* 118) shows the influence of *ἐλαφρός*.

If *τρίφος*, which Du Cange cites from a gloss as equivalent to *τρίβος*, is a genuine form, it was made from *τρίψω* and *ἔτριψα* on the model of *σκάφος* : *σκάψω* and *ἔσκαψα*, *ὅροφος* : *ἔρέψω* and *ἔρεψα*, etc. If *στῖφος* “throng, mass” and *στιφρός* “firm, solid” are akin to *στείβω*, their *φ* is due to some similar analogical influence (cf. the ambiguous *στιπτός* “trodden down” and “tough, sturdy”). Uhlenbeck’s (*Etym. Wörterb. d. ai. Sprache*) connection of Skt. *stibhiś* “tuft, bunch” with these words is not probable enough to warrant the assumption of a third root form beside **steip-* and **steib-*. For *γρυφός* beside *γρυβός*, see p. 200.

The reverse analogical change of original *φ* to *β* also occurs. In *κρυβήσομαι*, Eur., *ἐκρυβον*, *ἐκρύβην*, Apollod., +, *κρυβή*, *ἀποκρυβήσομαι*, LXX, +, *ἐγκρύβω*, Diod., +, *Κρύβηλος* Hesych., *Κρυβοί*, a Byzantine geographical name, etc. (cf. also Lobeck *Phryn.* 317), beside earlier *κρυφηδόν*, Hom., *κρύφιος*, Hes., +, *κρύφα*, etc., the change was due to the analogy of *τρίβω* beside *ἔτριψα*, *βλάβη*, *ἔβλαβην*, beside *βλάπτω*, and the like, perhaps in this case assisted by the existence of the adverbs *κρύβδην* and *κρύβδα*. Modern Greek has not only *κρύβω*, but also *σκάβω*, *ράβω*, *κλέβω*, etc. Cf. Hatzidakis *KZ*. 27. 76. If we assume an original aspirate for *βόμβος* on account of Skt. *bambharas* “bee” (found only in lexicons), *bambhāravas* “lowing” of cows, *bambharālis* “fly,” a persistent feeling for the onomatopoetic character of the word would help explain the change from voiceless *φ* to *β*. The same consideration applies to *στόμβος*. *Βαρύγχος*, *Βαρύφθογγος*, Galen *Lex. Hipp.*, beside *στόμφος* “bom-bast,” *στομφός* “bombastic,” *στόμφαξ*, *στομφάξω*, Ar.¹

¹These words have no connection with *στρέβος* “abuse, bad language,” or with *στρομφός* “spongy,” of sounds, “hollow, loud.”

There remain a number of words which show a variation between ϕ or $\mu\phi$ and $\mu\beta$, on the basis of which a number of scholars have inferred a change in Greek itself of aspirate to media after nasals.¹ The group $\mu\phi$, however, often remains (e.g., $\gamma\delta\mu\phi\sigma$, $\nu\mu\phi\eta$, $\mu\omega\mu\phi\eta$), and no satisfactory limitation of the operation of the supposed phonetic law has yet been proposed.

In some cases the variation is clearly Indo-European (see Brugmann *Grundr.* 1². 633), as $\grave{\alpha}\sigma\tau\epsilon\mu\phi\eta\acute{\iota}$ “firm,” $\sigma\tau\epsilon\mu\phi\upsilon\lambda$ “olives or grapes pressed dry,” Skt. *stambhate* “become firm or rigid”: $\sigma\tau\epsilon\mu\beta\omega$ “shake,” OHG. *stampfon*, Eng. *stamp*; $\grave{\alpha}\phi\beta\acute{\iota}\sigma$, $\nu\epsilon\phi\sigma$, etc.: $\ddot{\delta}\mu\beta\phi\sigma$, Skt. *ámbu* “water,” Arm. *amp* “cloud;” $\theta\acute{\alpha}\mu\beta\phi\sigma$ “astonishment,” ON. *dapr* “sad”: $\tau\acute{\alpha}\phi\sigma$ “astonishment;” $\kappa\acute{a}\phi\phi\omega$ “wither,” $\kappa\acute{a}\phi\phi\eta$ “hay,” $\kappa\acute{a}\phi\phi\sigma$, Lith. *skrebiú* “become dry”: *krámuβos* “dry, loud,” Ar., *krómuβos* “dry, roasted,” Hesych., *krōmuβów* “roast,” Diphil., NHG. *rümpfen*. In $\mu\epsilon\mu\phi\omega\mu\alpha\iota$: Ir. *mebul*, Goth. *bimampjan* (see above, p. 212) Greek has preserved only the aspirated form of the root. We have a similar interchange of I-E. labio-velars in $\ddot{\phi}\phi\iota\sigma$, Skt. *áhis* “snake”: OHG. *unc* “snake,” $\mathring{\iota}\mu\beta\eta\phi\iota\sigma$. $\mathring{\iota}\mu\beta\eta\mu\nu\alpha\iota\sigma$, Hesych. Perhaps, however, we should omit the last word on account of its vocalism (Brugmann *Grundr.* 1². 634).

$\sigma\tau\phi\mu\beta\phi\sigma$ “top” : $\sigma\tau\phi\acute{\iota}\phi\omega$, $\sigma\tau\phi\acute{\iota}\phi\sigma$, etc., was probably influenced by $\acute{\rho}\mu\beta\phi\sigma$ “top.”

The tendency established by such pairs as $\grave{\alpha}\sigma\tau\epsilon\mu\phi\eta\acute{\iota}$: $\sigma\tau\epsilon\mu\beta\omega$, $\grave{\alpha}\phi\beta\acute{\iota}\sigma$: $\ddot{\delta}\mu\beta\phi\sigma$, $\tau\acute{\alpha}\phi\sigma$: $\theta\acute{\alpha}\mu\beta\phi\sigma$, $\kappa\acute{a}\phi\phi\omega$: $\kappa\acute{a}\phi\phi\eta$, $\sigma\tau\phi\mu\beta\phi\sigma$: $\sigma\tau\phi\acute{\iota}\phi\omega$, sometimes became effective even where it was not assisted by similarity of meaning with any of these.² Thus we find $\mu\beta$ instead of ϕ in *κόρυμβος* “summit, hairpin,” *κορύμβη* “hairpin”: *κορυφή*, *κόρυφος* “summit, peak, hairpin” (see above, p. 204); *βρέμβος* = *βρέφος*, Hesych.; *κύμβος*, *κύμβη* “cup” : Skt. *kumbhás* “cup,” Av. *xumba-* “pot”; $\grave{\alpha}\tau\epsilon\mu\beta\omega$ “cheat” : Skt. *dabhnóti*, *dábhāti* “injure, deceive.” Perhaps we should set down here

¹ Most recently Otto Hoffmann, *Die Makedonen* 240 f., who gives references to earlier discussions. All the examples contain Greek labials except *πύνδαξ* *πνθμήν*, for which Brugmann, *Grundr.* 1². 633, suggests Indo-European variation between *d* and *dh*.

² For such imitative substitution, which is not to be denied a wide scope in language, and which many regard as a fundamental factor in the regular phonetic changes, compare Wheeler “Causes of Uniformity in Phonetic Change,” *Trans. Am. Phil. Assn.* 32, 5 ff., especially p. 14, and Thurneysen *Etymologie* 17 ff., *KZ*. 44. 111.

κύ(μ)βη "head," *E.M.*, Georg. Sanguinatius : Cretan *κυφά* "head," Hesych. *λιμφός· συκοφάντης . . . ή μηνυτής παρανόμων*, Hesych., is probably not to be identified with *λιμβός* "greedy," Hesych., +.

That the change in question took place after the dissimilation of aspirates is indicated by *κύμβος* : Av. *xumba-* from **khumbho-*, and *ἀτέμβω* : Skt. *dábhati* from **dhebh.*¹ Hence in *θρόμβος* "lump, clot of blood" : *τρέφεσθαι* "curdle," *ταρφύς*, etc., and *θρεμβός* "fat," *CGL.* : *τρέφω* (cf. *CP.* V. 334), we have to account for the initial aspirate by the analogy of such forms as *θρέψω*, *ἔθρεψα*, and *τέθραμμα*.

The occasional interchange of *bh* and *b* in the parent speech and of *φ* and *μβ* in Greek furnish us two possible points of contact between the suffixes in *φ* and *β*. Perhaps, then, it is not altogether accidental that both the suffixes are employed to form animal names and derogatory adjectives. See *CP.* V. 331, 333 ff., and Niedermann, *IF. Anz* 19. 32 f. The present writer, however, does not know of any word with Indo-European suffix *-bo* from *-bho*. We may, perhaps, suspect some such relationship between *ἀσκάλαφος*, *κάλαφος*, an unknown bird, Arist., +, and *ἀσκάλαβος*, *καλαβάς* "spotted lizard," Nicand., +. That the words date from prehistoric times is indicated by the fact that both *Ἄσκάλαφος* and *Ἄσκάλαβος* occur as mythological proper names. Their etymology is unknown. As was shown in *CP.* V. 326 ff., the Greek suffix *-βος* is chiefly due to adaptation in Greek itself. To the factors there discussed we may now add one more: the Greek substitution of *μβ* for *φ* seems to have affected a few words in which *φ* was a formative element.

The preceding discussion covers the words in which *φ* appears to be a formative element. The great majority of words in *-φη*, *-φης*, and *φος* are forms with radical *φ*, which, with their numerous compounds, e.g., *-γραφος*, *-σοφος*, *-τροφος*, swell the lists to such proportions that their publication must be deferred.

¹ *τύμβος* "foolish," a word that has been inferred from Euripides' *γέροντα τύμβον*, and Hesychius' *τυμβογέρων* *ἔσχατογηρως*, and compared with *τῦφος* "smoke," is purely imaginary.